

REMARKS

By this Amendment the specification has been amended to include topic headings and to otherwise improve its presentation, claim 1 has been amended to better define the invention, and claims 2-10 have been corrected.

A supplemental page 16 for the application containing an abstract of the disclosure is submitted herewith.

In the outstanding Office Action the examiner has rejected claims 1 and 6 under 35 U.S.C. 102(b) as being anticipated by Whittingham, he has rejected claims 2-4, 7 and 8 under 35 U.S.C. 103(a) as being unpatentable over Whittingham in view of Alfano et al., he has rejected claim 5 under 35 U.S.C. 103(a) as being unpatentable over Whittingham in view of Akkerman, he has rejected claim 9 under 35 U.S.C. 103(a) as being unpatentable over Whittingham in view of Abraham, and he has rejected claim 10 under 35 U.S.C. 103(a) as being unpatentable over Whittingham in view of Alfano et al. and Abraham.

These rejections must be withdrawn.

As stated in the specification, an actuator for industrial purposes with an overload clutch of the ball and ratchet type is know from the actuator ELECTRAC sold by Warner Electric Brake & Clutch Company. The clutch is arranged between the spindle and the output side of the

reduction gear. This position puts a limit to the speed of the actuator because of the high moment load on the clutch.

In Whittingham the clutch is also arranged between the spindle and the output side of the reduction gear as in the ELECTRAC actuator from Warner and has accordingly the same disadvantages that it is exposed to great moment loads.

According to applicants' amended claim 1, the overload clutch is arranged in connection with the first stage or one of the first stages of the reduction gear. That means that the overload clutch is not subjected to such great moment loads as in Whittingham whereby it can be made more compact and reliable. The location of the overload clutch also means that the actuator may be adapted easily to customer specific needs with various spindle units and subsequent gear stages.

Accordingly, Whittingham does not anticipate claim 1.

Whittingham furthermore does not anticipate claim 6 as he uses a special U-shaped bracket for mounting the jack on a motorbike.

According to claim 6, the rear mounting (8) and a bearing (41) for the spindle are secured in a mounting element consisting of two parts (40a, 40b) (Fig. 4 and 6). The mounting element is located in a recess in the cabinet and secured by means of a nut (42) from the outside (Fig. 11).

This is not to be found in Whittingham. In this context, Whittingham uses a thrust bearing (126) located between a brake unit (120) and the

housing (22). Accordingly, in Whittingham the bearing for the spindle is not located in the rear mounting.

The examiner has rejected claim 2-4 and 7-8 on basis of Whittingham in view of Alfano. Alfano uses only one gear stage, namely a worm gear where the worm wheel is attached to the end of the spindle by means of a ball and ratchet overload clutch. Accordingly, the overload clutch is arranged as in Whittingham, namely between the spindle and the output stage of the gear. Combining Alfano with Whittingham would result in replacement of the frictional clutch with a ball and ratchet clutch and thereby not solving the problem posed by the invention. Replacing the first stage of the gear train in Whittingham with the worm gear in Alfano would result in two overload clutches which has no meaning. As to claim 3 stating that the ring (24) with the balls is connected to a shaft member (25) with a gear wheel (31) cannot be deducted from either Whittingham or Alfano or the combination. In Alfano the balls are in engagement with the bushing attached to the end of the spindle. In claim 4 is stated that the shaft member (25) is connected with a brake device (32-25). This shaft member (25) is obviously not a part of the spindle. Whittingham has also a brake device (120) however this is located on a shaft end of the spindle. This location requires a brake with a higher braking force due to the higher moment loads at that place. Arranging the brake device as in Whittingham is traditional as has been used, e.g., by Warner at least prior to 1980. Regarding claim 7 relating to the

attachment of the guide profile (7), this can not be found in Whittingham or Alfano. In fact, Alfano uses no separate guide tube and in Whittingham the guide tube is only attached at the end there is no claws (11b, 11a) gripping around the edge of the guide tube (Fig. 1, 2). As to claim 8 stating that an electric control (8) for the actuator is located within the cabinet of the actuator this is also not known from Whittingham or Alfano. Traditionally the control electronic besides from the end stop switches has always been located in a separate cabinet, see, e.g., the control boxes CB on website www.linak.com.

Nothing in Akkerman or Abraham would overcome the above-noted deficiencies in Whittingham (with or without Alfano et al.).

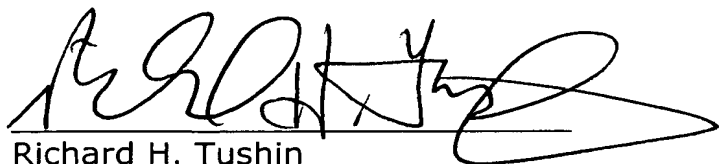
It should be noted that claim 1 has been amended in part due to the disclosure in Chapman, U.S. Patent No. 2,531,109.

Favorable reevaluation is requested.

Respectfully submitted,

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